

We Claim:

1. A method of defining an order for sending a plurality of requests for statistics to an associated plurality of nodes in a communication network, one or more requests of said plurality of requests being associated with an individual node of said associated plurality of nodes and each of said associated plurality of nodes having one or more node attributes, said method comprising:

defining a sequence for sending said plurality of requests to be sent to said associated plurality of nodes, said sequence based on a value of a selected node attribute of said one or more node attributes of each of said associated plurality of nodes; and

initiating each of said plurality of requests according to said sequence.

2. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, said method further comprising defining for each node of said associated plurality of nodes a translated value related to said value of said selected node attribute prior to said defining said sequence and wherein said sequence is based on a ranking of all of said translated values.

3. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, wherein said defining said sequence comprises selecting two or more of said node attributes and for each of said two or more of said node attributes, refining ranking of said associated plurality of nodes based on said value of said each of said two or more of said node attributes.

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4. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, said method further comprising:

receiving data regarding a plurality of responses from said associated plurality of nodes which received said plurality of requests;

tracking a number of outstanding requests in a segment of said network, said segment associated with said associated plurality of nodes, said number of outstanding requests relating to a number of said plurality of requests in said segment for which responses have not been received, said number of said outstanding requests associated with an upper bound number; and

wherein said initiating each of said plurality of requests comprises comparing said number of outstanding requests in said segment with said upper bound number and initiating one request of said plurality of requests when said number of outstanding requests in said segment is less than said upper bound number.

5. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, said method further comprising:

receiving data regarding a plurality of responses from each of said associated plurality of nodes which received said plurality of requests;

tracking a number of outstanding requests for said each of said associated plurality of nodes, said number of outstanding requests for said each of said associated plurality of nodes relating to a number of said plurality of requests for said each of said associated plurality of nodes for which responses have not been received, each said number of said outstanding requests associated with an upper bound number; and

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wherein for each of said associated plurality of nodes, said initiating each of said plurality of requests when said number of said outstanding requests is less than said upper bound number, said each of said plurality of requests being sent independently to said each of said associated plurality of nodes.

6. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 5, wherein said upper bound number for said each of said associated plurality of nodes is separately defined for said each of said associated plurality of nodes in said segment.

7. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, wherein:

said value of said selected node attribute comprises a value representing a number of said plurality of requests to be initiated for each of said associated plurality of nodes in a time interval; and

said defining said sequence ranks said associated plurality of nodes in descending order utilizing each of said values of said selected node attribute of said associated plurality of nodes.

8. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, wherein:

said selected node attribute is a response time of each of said associated plurality of nodes to previous requests of said plurality of requests; and

said defining said sequence ranks said associated plurality of nodes in descending order utilizing each of said values of said selected node attribute of said associated plurality of nodes.

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9. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, wherein:

said selected node attribute identifies an operating characteristic of each of said associated plurality of nodes; and

said defining said sequence ranks said associated plurality of nodes in a predetermined order utilizing each of said values of said selected node attribute of said associated plurality of nodes.

10. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 9, wherein:

said operating characteristic indicates wireless and non-wireless transmission technologies associated with said each of said associated plurality of nodes; and

said defining said sequence ranks said associated plurality of nodes utilizing values of said operating characteristic, ranking nodes of said associated plurality of nodes having wireless transmission technologies with a higher priority.

11. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, wherein said method is embodied in a computer program.

12. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 1, wherein said method is repeated in a cyclic time interval.

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13. A method of defining an order for sending a plurality of requests for statistics as claimed in Claim 4, wherein said method further comprising:

tracking a second number of other outstanding requests for said each of said associated plurality of nodes, said second number of other outstanding requests for said each of said associated plurality of nodes relating to a number of said plurality of requests for said each of said associated plurality of nodes for which responses have not been received, each said second number of other outstanding requests associated with a nodal upper bound number; and

wherein said initiating each of said plurality of requests is performed when said number of said outstanding requests for said segment is less than said upper bound number and said second number of other outstanding requests is less than said nodal upper bound number for said individual node associated with said each of said plurality of requests.

14. A statistics collection unit associated with a communication network, said communication network comprising a plurality of nodes and each of said nodes having one or more node attributes, said statistics collection unit comprising:

a computer; and

a program executed on said computer, said program comprising:

a sequencing module defining a sequence for sending a plurality of requests for statistics to be sent to an associated plurality of nodes of said plurality of nodes, one or more requests of said plurality of requests being associated with an individual node of said associated plurality of nodes, said sequence based on a value of a selected node attribute of said one or more node attributes of each of said associated plurality of nodes; and

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an initiating module initiating each of said plurality of requests according to said sequence.

15. A statistics collection unit as claimed in Claim 14, wherein:

said program further comprises a translation module defining for each node of said associated plurality of nodes a translated value related to said value of said selected node attribute prior to said sequencing module defining said sequence; and

said sequence in said sequencing module is based on a ranking of all of said translated values.

16. A statistics collection unit as claimed in Claim 14, wherein said defining said sequence in said sequencing module comprises selecting two or more of said node attributes and for each of said two or more of said node attributes, refining ranking of said associated plurality of nodes based on said value of said each of said two or more of said node attributes.

17. A statistics collection unit as claimed in Claim 14, wherein:

said program further comprises:

a receiving module receiving data regarding a plurality of responses from said associated plurality of nodes which received said plurality of requests; and

a tracking module tracking a number of outstanding requests in a segment of said communication network, said segment comprising said associated plurality of nodes, said number of outstanding requests relating to a number of said plurality of requests in said segment for which responses have not been received,

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said number of said outstanding requests associated with an upper bound number;
and

said initiating module initiates each of said plurality of requests by comparing said number of outstanding requests in said segment with said upper bound number and initiating one request of said plurality of requests when said number of outstanding requests in said segment is less than said upper bound number.

18. A statistics collection unit as claimed in Claim 14, wherein

said program further comprises

a receiving module receiving data regarding a plurality of responses from each of said associated plurality of nodes which received said plurality of requests; and

a tracking module tracking a number of outstanding requests for said each of said associated plurality of nodes, said number of outstanding requests for said each of said associated plurality of nodes relating to a number of said plurality of requests for said each of said associated plurality of nodes for which responses have not been received, each said number of said outstanding requests associated with an upper bound number; and

for each of said associated plurality of nodes, said initiation module initiates each of said plurality of requests when said number of said outstanding requests is less than said upper bound number, said each of said plurality of requests being sent independently to said each of said associated plurality of nodes.

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19. An apparatus for use in a statistics collection unit in a communication network, said communication network comprising a plurality of nodes, said apparatus comprising a device defining a sequence for sending a plurality of requests for statistics to be sent from said statistics collection unit to an associated plurality of nodes of said plurality of nodes in said segment.

20. An apparatus for use in a statistics collection unit as claimed in Claim 19, wherein for said device:

one or more requests of said plurality of requests is associated with an individual node of said associated plurality of nodes;

each of said associated plurality of nodes has one or more node attributes;

said sequence is based on a ranking of said associated plurality of nodes based on a value of a selected node attribute of said one or more node attributes of each of said associated plurality of nodes; and

said device initiates each of said plurality of requests according to said sequence.

21. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein:

said device defines for each node of said associated plurality of nodes a translated value related to said value of said selected node attribute prior to said defining said sequence; and

said sequence is based on a ranking of all of said translated values.

22. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein for said device said defining said sequence comprises selecting two or more of said node attributes

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and for each of said two or more of said node attributes, refining ranking of said associated plurality of nodes based on said value of said each of said two or more of said node attributes.

23. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein said device:

receives data regarding a plurality of responses from said associated plurality of nodes which received said plurality of requests;

tracks a number of outstanding requests in a segment of said network, said segment comprising said associated plurality of said nodes, said number of outstanding requests relating to a number of said plurality of requests in said segment for which responses have not been received, said number of said outstanding requests associated with an upper bound number; and

initiates each of said plurality of requests by comparing said number of outstanding requests in said segment with said upper bound number and initiating one request of said plurality of requests when said number of outstanding requests in said segment is less than said upper bound number.

24. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein said device:

receives data regarding a plurality of responses from each of said associated plurality of nodes which received said plurality of requests;

tracks a number of outstanding requests for said each of said associated plurality of nodes, said number of outstanding requests for said each of said associated plurality of nodes relating to a number of said plurality of requests for said each of said associated plurality of

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nodes for which responses have not been received, each said number of said outstanding requests associated with an upper bound number; and

for each of said associated plurality of nodes, initiates each of said plurality of requests when said number of outstanding requests is less than said upper bound number, said each of said plurality of requests being sent independently to said each of said associated plurality of nodes.

25. An apparatus for use in a statistics collection unit as claimed in Claim 24, wherein said upper bound number for said each of said associated plurality of nodes is separately defined for said each of said associated plurality of nodes in said segment.

26. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein:
said selected node attribute comprises a value representing a number of said plurality of requests to be initiated for each of said associated plurality of nodes in a time interval; and
said defining said sequence ranks said associated plurality of nodes in descending order utilizing each of said value of said selected node attribute of said associated plurality of nodes.

27. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein:
said selected node attribute is a response time of each of said individual nodes to previous requests of said plurality of requests; and
said defining said sequence ranks said associated plurality of nodes in descending order utilizing each of said value of said selected node attribute of said associated plurality of nodes.

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28. An apparatus for use in a statistics collection unit as claimed in Claim 20, wherein:

said selected node attribute identifies an operating characteristic of each of said associated plurality of nodes; and

said defining said sequence ranks said associated plurality of nodes in a predetermined order utilizing each of said value of said selected node attribute of said associated plurality of nodes.

29. An apparatus for use in a statistics collection unit as claimed in Claim 28, wherein:

said operating characteristic indicates wireless and non-wireless transmission technologies associated with said each of said associated plurality of nodes; and

said defining said sequence ranks said associated plurality of nodes utilizing values of said operating characteristic, ranking nodes of said associated plurality of nodes having wireless transmission technologies with a higher priority.

30. A computer executable program for use on a communication network, said

communication network comprising a plurality of nodes, said computer executable program executing the steps of:

defining a sequence for sending a plurality of requests for statistics to an associated plurality of said nodes of said plurality of nodes, one or more requests of said plurality of requests being associated with an individual node of said associated plurality of nodes and each of said associated plurality of nodes having one or more node attributes, said sequence based on a value of a selected node attribute of said one or more node attributes of each of said associated plurality of nodes; and

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initiating each of said plurality of requests according to said sequence.

31. A computer executable program as claimed in Claim 30, said computer executable program further executing the step of defining for each node of said associated plurality of nodes a translated value related to said value of said selected node attribute prior to said defining said sequence and wherein said sequence is based on a ranking of all of said translated values.

32. A computer executable program as claimed in Claim 30, wherein said defining said sequence comprises selecting two or more of said node attributes and for each of said two or more of said node attributes, refining ranking of said associated plurality of nodes based on said value of said each of said two or more of said node attributes.

33. A computer executable program as claimed in Claim 30, wherein
said computer executable program further executing the steps of
receiving data regarding a plurality of responses from said associated
plurality of nodes which received said plurality of requests; and
tracking a number of outstanding requests in a segment of said
communication network, said segment comprising said associated plurality of
nodes, said number of outstanding requests relating to a number of said plurality
of requests in said segment for which responses have not been received, said
number of said outstanding requests associated with an upper bound number; and
said initiating each of said plurality of requests comprises comparing said number of
outstanding requests in said segment with said upper bound number and initiating one request of

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said plurality of requests when said number of outstanding requests in said segment is less than said upper bound number.

34. A computer executable program as claimed in Claim 30, wherein

said computer executable program further executing the steps of

receiving data regarding a plurality of responses from each of said

associated plurality of nodes which received said plurality of requests; and

tracking a number of outstanding requests for said each of said associated

plurality of nodes, said number of outstanding requests for said each of said

associated plurality of nodes relating to a number of said plurality of requests for

said each of said associated plurality of nodes for which responses have not been

received, each said number of said outstanding requests associated with an upper

bound number; and

for each of said associated plurality of nodes, said initiating each of said plurality of

requests when said number of outstanding requests is less than said upper bound number, said

each of said plurality of requests being sent independently to said each of said associated

plurality of nodes.